METRIC
A-A-20165C
January 16, 2003
SUPERSEDING
A-A-20165B
February 12, 1998

#### **COMMERCIAL ITEM DESCRIPTION**

# POTATO-BASED MIX, PELLETIZED, DEHYDRATED (FOR FRENCH-FRIED TYPE PRODUCTS)

# The U.S. Department of Agriculture (USDA) has authorized the use of this Commercial Item Description (CID).

**1. SCOPE.** This CID covers dehydrated pelletized potato-based mix, for use with extruder equipment with an internal rehydrating device, packed in commercially acceptable containers, suitable for use by Federal, State, local governments and other interested parties.

#### 2. PURCHASER NOTES.

### 2.1 Purchasers shall specify the following:

- When analytical requirements are different than specified (Sec. 5.1).
- When analytical requirements need to be verified (Sec. 5.2).
- Manufacturer's /distributor's certification (Sec. 8.2) or USDA certification (Sec. 8.3).

## 2.2 Purchasers may specify the following:

- Manufacturer's quality assurance (Sec 8.1 with 8.1.1) or (Sec 8.1 with 8.1.2).
- Packaging requirements other than commercial (Sec. 9).

# 3. MANUFACTURER'S/DISTRIBUTOR'S NOTES. Manufacturer's/distributor's products *shall meet* the requirements of the:

- Salient characteristics (Sec. 4).
- Analytical requirements: as specified by the purchaser (Sec. 5).
- Manufacturer's/distributor's product assurance (Sec. 6).
- Regulatory requirements (Sec. 7).
- Quality assurance provisions: as specified by the purchaser (Sec. 8).
- Packaging requirements other than commercial: as specified by the purchaser (Sec. 9).

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### 4. SALIENT CHARACTERISTICS.

- **4.1 Raw ingredients.** The dehydrated potato pellets shall be prepared from clean, sound, whole or potato pieces, which are dehydrated in accordance with good manufacturing practices.
- **4.1.1** <u>Additives and ingredients</u>. The dehydrated pelletized potato-based mix shall contain those additives appropriate for manufacturing. All additives or ingredients used in the preparation of the product shall be of Food Chemicals Codex purity.

## **4.2 DEHYDRATED PRODUCT.**

- **4.2.1 Processing.** The dehydrated potato-based mix shall be prepared and packaged in accordance with good commercial practice (21 CFR Part 110).
- **4.2.2** <u>Defects.</u> There shall not be any specific defect or combination of defects which materially affects the appearance, edibility, storage, or shipping quality of the dehydrated pelletized potatobased mix
- **4.2.3** <u>Composition</u>. The French-fried potato mix shall be composed of dehydrated potato pellets, starch, guar gum, salt, methycellulose, sodium bisulfite, butylated hydroxyanisole, and/or butylated hydroxytoluene.
- **4.2.4 Potato mix shape.** The dehydrated potato-based mix shall be in a porous pelletized form, free flowing, and free from clumps that will not break under slight finger pressure. The finished product pelletization shall be of such size that a minimum of 80 percent, by weight, shall be retained on a U.S. Standard No. 6 sieve and a maximum of 10 percent, by weight, shall be retained on a U.S. Standard No. 8 sieve.
- **4.2.5** <u>Moisture</u>. The dehydrated pelletized potato-based mix shall contain not more than 8.5 percent moisture.
- **4.2.6** <u>Labeling</u>. Directions on the package shall include the following:

# FOR USE IN POTATO EXTRUDER EQUIPMENT WITH INTERNAL REHYDRATING DEVICE. OPEN CAN/BAG, POUR INTO HOPPER.

## **4.3 REHYDRATED PRODUCT.**

- **4.3.1 Product performance.** The product shall completely rehydrate in the internal rehydration chamber of the dispensing machine in less than 60 seconds (See Sec. 5.6).
- **4.3.2** Color. When extruded and fried in accordance with label directions, the prepared Frenchfried potato colors shall be determined by using USDA color standards for frozen french-fried

potatoes. The French-fried potatoes shall meet color standards not lighter than USDA No. 0 nor darker than USDA No. 2 color standard for frozen french-fried potatoes and shall be practically free from variable colors.

- **4.3.3** <u>Texture</u>. When extruded and fried in accordance with label directions, the French-fried potatoes shall have a texture typical of Grade A French-fried potatoes.
- **4.3.4 Fat content.** When extruded and fried in accordance with label directions, the fat content for the prepared French-fried potatoes shall not exceed 22.0 percent by weight of the finished product (See Sec. 5.7.).
- **4.3.5** <u>Odor and flavor</u>. When extruded and fried in accordance with label directions, the French-fried potatoes shall have a flavor typical of fresh cooked French-fried potatoes and shall be free from objectionable odors and flavors.
- **4.4** <u>Foreign material</u>. The dehydrated pelletized potato-based mix shall be clean, sound, wholesome, and free from evidence of rodent or insect infestation. There shall be practically no foreign material such as, but not limited to, dirt, insect parts, hair, wood, glass, or metal.
- **4.5** <u>Age requirement</u>. Unless otherwise specified in the solicitation, contract, or purchase order, the dehydrated pelletized potato-based mix shall be produced/packaged no more than 120 days prior to date of delivery.
- **4.6** Shelf life. Unless otherwise specified in the solicitation, contract, or purchase order, the dehydrated pelletized potato-based mix shall have a shelf life of at least 12 months from date of production/packaging.

### 5. ANALYTICAL REQUIREMENTS.

- **5.1** <u>Analytical requirements</u>. Unless otherwise specified in the solicitation, contract, or purchase order, the analytical requirements for the dehydrated pelletized potato-based mix and the rehydrated product shall be as stated in Sections 4.2.5 and 4.3.4.
- **5.2 <u>Product verification.</u>** When USDA verification of analytical requirements is specified in the solicitation, contract, or purchase order, the following procedures will be followed.
- **5.2.1** <u>Sampling procedures</u>. USDA inspection service will select the number of product containers based on USDA inspection service sampling procedures and plans.
- **5.2.2** Preparation of sample for moisture test. The sample to be analyzed for moisture shall be a composite sample. The composite sample shall be 454 grams (1 pound) and prepared from subsamples drawn from randomly selected containers. Prepare a clean, dry Waring Blender or similar mill by grinding a sample and then discarding it. Grind approximately 100 grams of the

well-mixed sample in the prepared Waring Blender or similar mill for one minute. Place the ground material in a small, dry, tightly-closed container for at least ½ hour. Pass the ground material over a U.S. Standard No. 20 sieve nested on a U.S. Standard No. 40 sieve. That portion which passes through the U.S. Standard No. 20 mesh screen but not the U.S. Standard No. 40 mesh screen is to be analyzed and shall be weighed immediately or placed in a small, dry container with a tightly closed lid until ready for analysis (a one-half pint Mason jar is satisfactory).

**5.3** <u>Analytical testing</u>. When specified in the solicitation, contract, or purchase order, the analyses shall be in accordance with the following methods from the Official Methods of Analysis of the AOAC International:

<u>Test</u>	Method
Moisture <u>1</u> / (loss on drying)	934.06
Fat	933.05 or 985.15

- 1/ Place the sample dishes with cocked lids in the vacuum-oven and dry for 6 hours at 70°C (158°F) under a pressure of not more than 100 mm of mercury.
- **5.4** <u>Test results</u>. The test results for moisture and fat shall be reported to the nearest 0.1 percent. Any result not conforming to the finished product requirements shall be cause for rejection of the lot.
- **5.5.** Pellet size. The pellet size of the dehydrated potato-based mix shall be determined by sieve testing. The contents of one primary container, approximately  $100 \text{ g} \pm 0.1 \text{ g}$  at a time, shall be mechanically shaken (Rotap, W.S. Tyler, or equivalent) for 30 seconds without tap on a U.S. Standard No. 6 sieve nested over a U.S. Standard No. 8 sieve. The product will meet the requirements specified in Section 4.2.4. The pellet size shall be reported to the nearest 1.0 percent.
- **5.5.1** Screening procedure. Open a can of dehydrated potato-based mix and pour it through a splitter, or open a bag and remove approximately 454 grams (1 pound) of product. Weigh out a  $100 \text{ g} \pm 0.1 \text{ g}$  sample on a paper plate. Assemble sieves in the following order from top to bottom: U.S. Standard No. 6 sieve, U.S. Standard No. 8 sieve, three blank sieves larger than a U.S. Standard No. 6 sieve, and a pan. Pour the weighed sample onto the top sieve. Place the nested sieves in a Rotap, W.S. Tyler, or equivalent, and shake for only 30 seconds with the tapper raised. Remove the sieves from the Rotap, W.S. Tyler, or equivalent, separate and weigh the product on the U.S. Standard No. 6 and U.S. Standard No. 8 sieves and in the pan.
- **5.6** Testing in dispenser equipment with internal rehydrating device. Follow Series 500 dispenser machine operating, cleaning, and charging instructions. Open a can or bag of potato mix product, pour the contents into the dispenser machine hopper. Follow the dispenser machine

operating instructions and charge the dispenser. When the potato mix is fully rehydrated, the ready light on the front of dispenser will illuminate. The dispenser is ready to operate. Depress the ready button, the dispenser machine will automatically dispense a 624 gram (22 ounce) portion for sampling. Collect the formed product on a transfer tray. The dispensed potato mix product pieces or shapes should be uniformly formed. Dispensed product should not be soupy or contain large dry pockets of unrehydrated potato mix. Small specks of unrehydrated potato uniformly dispersed in the formed product is normal.

- **5.7 Fry test.** Dispense another 624 gram (22 ounce) portion for sampling onto a transfer tray. Submerge the fry basket into good quality clean frying oil heated to 176.6°C (350°F). Shake the dispensed product in the submerged fry basket. At 10 seconds, raise the fry basket and lightly shake the product three times. Resubmerge the basket and continue cooking for 80 seconds or to desired color.
- **6. MANUFACTURER'S/DISTRIBUTOR'S PRODUCT ASSURANCE.** The manufacturer/ distributor shall certify that the dehydrated pelletized potato-based mix shall meet the salient characteristics of this CID, conform to the their own specifications, standards, and quality assurance practices, and be the same dehydrated pelletized potato-based mix offered for sale in the commercial market. The purchaser reserves the right to require proof of conformance.
- 7. REGULATORY REQUIREMENTS. The delivered dehydrated pelletized potato-based mix shall comply with all applicable Federal, State, and local mandatory requirements and regulations relating to the preparation, packaging, labeling, storage, distribution, and be the same dehydrated pelletized potato-based mix offered for sale within the commercial marketplace. Delivered dehydrated pelletized potato-based mix shall comply with all applicable provisions of the Federal Food, Drug, and Cosmetic Act, the Fair Packaging and Labeling Act, and regulations promulgated thereunder.
- **8. QUALITY ASSURANCE PROVISIONS.** Purchaser shall specify 8.2 or 8.3; purchaser may specify 8.1 with 8.1.1 or 8.1 with 8.1.2.
- **8.1** Manufacturer's quality assurance. When required in the solicitation, contract, or purchase order, the product manufacturer shall be required to provide evidence, by certificate, that the manufacturing plant has undertaken one of the following quality assurance measures within 12 months prior to providing a bid, or no later than 10 business days from the date of awarding of the contract. Failure to provide this documentation within the proper time frame may result in the contract being terminated for cause.
- **8.1.1** Plant systems audit. A plant systems audit (PSA) conducted by USDA, Agricultural Marketing Service (AMS), or another audit performed by a third party auditing service and is required within 12 months prior to the date of the awarding of the contract. (An AMS PSA verifies the manufacturer's capability to produce products in a clean, sanitary environment in accordance with Title 21 Code of Federal Regulations Part 110 Current Good Manufacturing

Practice in Manufacturing, Packing, or Holding Human Food, and verifies that the manufacturer has in place an internal quality assurance program. The AMS PSA determines the manufacturer's ability to produce under this CID, if the products of interest are identified at the time of the PSA.)

- **8.1.2** Plant survey. A plant survey conducted by USDA, AMS or another survey performed by a third party auditing service and is required within 12 months prior to the date of the awarding of the contract. (An AMS plant survey audit verifies that, at the time of the survey, the manufacturer produces products in a clean, sanitary environment in accordance with Title 21 Code of Federal Regulations Part 110 Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food.)
- **8.2** <u>Manufacturer's/distributor's certification</u>. When required in the solicitation, contract, or purchase order, the manufacturer/distributor will certify that the finished dehydrated pelletized potato-based mix distributed meets or exceeds the requirements of this CID.
- **8.3** <u>USDA certification</u>. When required in the solicitation, contract, or purchase order that product quality and acceptability or both be determined, the Processed Products Branch (PPB), Fruit and Vegetable Programs (FVP), AMS, USDA shall be the certifying program. PPB inspectors shall certify the quality and acceptability of the dehydrated pelletized potato-based mix in accordance with PPB procedures which include selecting random samples of the packaged dehydrated pelletized potato-based mix, evaluating the samples for conformance with the salient characteristics of this CID and other contractual requirements, and documenting the findings on official PPB score sheets and/or certificates. In addition, when required in the solicitation, contract, or purchase order, PPB inspectors will examine the dehydrated pelletized potato-based mix for conformance to the United States Standards for Condition of Food Containers in effect on the date of the solicitation.
- **9. PACKAGING.** Preservation, packaging, packing, labeling, and case marking shall be commercial unless otherwise specified in the solicitation, contract, or purchase order.
- 10. USDA INSPECTION NOTES. When Section 8.3 is specified in the solicitation, contract, or purchase order, USDA certification shall include evaluation of the quality and condition of samples of packaged dehydrated pelletized potato-based mix, and compliance with requirements in the following areas:
  - Salient characteristics (Sec. 4).
  - Analytical requirements *when specified in the solicitation, contract, or purchase order* (Sec. 5.1). When USDA analytical testing is specified, PPB inspection personnel shall select samples and submit them to the USDA, Science and Technology Programs (S&TP) laboratory for analysis.
  - Packaging requirements (Sec. 9 or as specified in the solicitation, contract, or purchase order).

#### 11. REFERENCE NOTES.

- 11.1 <u>USDA certification contact</u>. For USDA certification, contact the **Branch Chief**, **PPB**, **FVP**, **AMS**, USDA, STOP 0247, 1400 Independence Avenue, SW, Washington, DC 20250-0247, telephone (202) 720-4693, Fax (202) 690-1527, or via E-mail: Terry.Bane@usda.gov.
- 11.2 <u>Analytical testing and technical information</u>. For USDA technical information on analytical testing, contact the **Branch Chief**, **Technical Service Branch**, **Science and Technology Programs** (S&TP), AMS, USDA, STOP 0272, 1400 Independence Ave, SW, Washington, DC 20250-0272, telephone (202) 690-0621, or via E-mail: anita.okrend@usda.gov.

### 11.3 Sources of documents.

## 11.3.1 Sources of information for nongovernmental documents are as follows:

Copies of the Official Methods of Analysis of the AOAC International may be obtained from: AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877, telephone (301) 924-7077. Internet address: <a href="http://www.aoac.org">http://www.aoac.org</a>.

Copies of the Food Chemicals Codex may be purchased from: National Academy Press, 2101 Constitution Avenue, NW, Lockbox 285, Washington, DC 20055, telephone (800) 624-8373 or (202) 344-3313, or Fax (202) 334-2451. Internet address: http://www.nap.edu.

## 11.3.2 Sources of information for governmental documents are as follows:

Applicable provisions of the Fair Packaging and Labeling Act are contained in 16 CFR Parts 500 to 503. The Federal Food, Drug, and Cosmetic Act are contained in 21 CFR Parts 1 to 199. These documents may be purchased from: Superintendent of Documents, ATTN:

New Orders, P.O. Box 371954, Pittsburgh, PA 15250-7954. Credit card (MasterCard or Visa) purchases may be made by calling the Superintendent of Documents on (202) 512-1800 or on the Internet at: http://www.access.gpo.gov/nara.

Copies of this CID and the United States Standards for Condition of Food Containers are available from: Head, Food Quality Assurance Staff, FVP, AMS, USDA, STOP 0243, 1400 Independence Ave., SW, Washington, DC 20250-0243, telephone (202) 720-9939, Fax (202) 690-0102, via E-mail: FQAStaff@usda.gov or on the Internet at: <a href="http://www.ams.usda.gov/fv/fvqual.htm">http://www.ams.usda.gov/fv/fvqual.htm</a>.

Information concerning licensed suppliers of USDA color standards for frozen French-fried potatoes may be obtained from: Branch Chief, PPB, FVP, AMS, USDA, STOP 0247, 1400 Independence Avenue, SW, Washington, DC 20250-0247, telephone (202) 720-4693, Fax (202) 690-1527, or via E-mail: Terry.Bane@usda.gov.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: Commander, Defense Supply Center Philadelphia, ATTN: DSCP-HSL, 700 Robbins Avenue, Philadelphia, PA 19111-5092 or Fax (215) 737-2963, or via E-mail: Sally.A.Gallagher@dscp.dla.mil.

Military activities should submit requests for copies of this CID to: Standardization Documents Order Desk, Document Automation and Production Service, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.

## MILITARY INTERESTS: CIVIL AGENCY COORDINATING ACTIVITIES:

<u>Custodians</u> DOJ - BOP

HHS - NIH, IHS

USDA - FV

Navy - SA VA - OSS

Air Force - 35

Army - GL

## **Review Activities**

### PREPARING ACTIVITY:

Army - MD, QM DLA - SS

Navy - MC (Project No. 8915-P097)

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